



Modular Manual Scanning System



Cross Block

BGS001

The Cross Block is used to connect two components together with one oriented perpendicular to the other.



Connector Block

BGS003

The Connector Block is used to connect two components in-line with each other.



Pivot Block

BGS004

The Pivot Block is used to connect two components together and provide one lockable degree of freedom between the components.



Wheel Block

BGS008

Three of the sides of the Wheel Block feature dovetail grooves so that it may be attached to other components. A Brake (BTS018) may be installed in the fourth side to lock the wheel. The wheel block includes a magnetic wheel (BTS031) fastened to the axle.



Stick

BGS016-

The Stick is a basic building component with dovetail grooves on all six sides. Various lengths are available to provide versatility.

Bar Length (cm)	
6	14
8	16
10	18
12	20



Swivel

BGS017

The Swivel connects two components together at right angles and provides one degree of freedom.



Encoded Wheel Block

BGS019-A30

The Encoded Wheel Block contains an optical encoder to provide position location during scanning. It may be plugged into any standard Jireh umbilical. Patch cables are available to input the encoder signal into most major instruments.



Frame Side Member

BGS021

The Frame Side Members, when fastened together with the included colored nut, form the structural sides of the Stix frame. The mating faces lock together to provide adjustment of the frame arc. The Frame Side Members also provide mounting points for the Wheel Blocks and Slide Bars (BG0038-XX)



Frame End

BGS022

The Frame End provides a mounting point for the final Slide Bar (BG0038-XX) in the Stix frame.



Stix Frame

The STIX Frame is used to create a framework to hold probe holders for scanning on ferrous surfaces. * The number of Slide Bars is usually one more than the number of Frame Side Member pairs. If Y-axis is required reduce the number of Slide Bars by the number of Y-axis required.

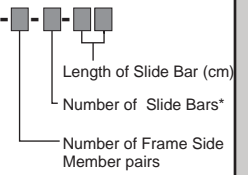
Included Components:

(4)BGS008, BGS021, (2)BGS022, (1)BGS024, BG0038-XX

BGS023-2-3-20 (shown)

See BGS032 Sizing Information on page ?

BGS023-



Encoder Arm

BGS025

The Encoder Arm may be mounted on any Slide Bar with its integrated dovetail clamp.



Wheel Block Bracket

BGS029

The wheel block bracket can be used to mount a wheel block (BGS008) to a slide bar.



Spring Loaded Encoder

BGS030-A30

Encoder Assembly may be mounted on any Slide Bar with its integrated dovetail clamp. It includes a non-magnetic wheel which remains in contact with the inspected surface by means of a torsion spring. It may be plugged into any standard Jireh umbilical. Patch cables are available to input the encoder signal into most major instruments.



Double Wheel Block Bracket

BGS048

The Double Wheel Block Bracket is used to mount 2 Wheel Blocks (BGS008) to a Slide Bar.



Slide/Frame Bar

BG0038-

The Slide Bars complete the structure of the Stix frame by joining the two sides formed by the Frame Side Members. They provide dovetail grooves into which the Probe Holders, Stix Encoder, Umbilicals, or other accessories may be attached.

Slide Bar Length (cm)	
20	40
25	45
30	55
35	

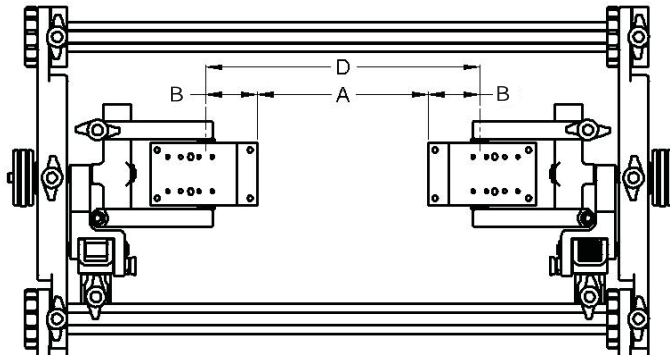
BGS032 Sizing Information

The Stix frame is constructed by joining pairs of Frame Side Members with cross members, or Slide Bars. The number of Frame Side Member pairs, which depends on the number of probes you wish to hold, may be determined with the following chart:

Part Number	Typical Number of Probes*	Minimum Pipe Diameter cm (in)	Max. Pipe Dia. for good Tracking, cm (in)
BGS023-2-x-xx	4	7.6 (3.0)	91.4 (36.0)
BGS023-3-x-xx	6	7.6 (3.0)	190.5 (75.0)
BGS023-4-x-xx	8	14.0 (5.5)	289.6 (114.0)
BGS023-5-x-xx	10	20.3 (8.0)	388.6 (153.0)
BGS023-6-x-xx	12	26.3 (10.5)	487.7 (192.0)

*based on one pair of probes per Slide Bar with one Slide bar left empty for umbilical(s) mounting. For Slide Bar lengths less than 30cm, 2 probes may not fit. Also, it is possible to fit more than two probes side-by-side on the longer Slide bars

The length of the Slide Bars may be determined as follows: First, calculate the maximum required distance 'D' (see figure below) from the following: $D = A + (2 \times B)$ where A is the maximum distance required between probe faces and B depends on your wedge;



Second, use the chart below to find the P/N of the frame which has a maximum distance D greater than or equal to the D value calculated above. Ensure you are in the correct column for your probe holder size.

Part Number	Maximum Distance D, cm (in)		
	Small Probe Holder	Large Probe Holder, Std Arm	Large Probe Holder, Ext. Arm
BGS023-x-x-15			
BGS023-x-x-20	2.6 (1.03)		
BGS023-x-x-25	7.6 (3.00)	2.6 (1.03)	
BGS023-x-x-30	12.6 (4.97)	7.6 (3.00)	4.5 (1.78)
BGS023-x-x-35	17.6 (6.94)	12.6 (4.97)	9.5 (3.74)
BGS023-x-x-40	22.6 (6.94)	17.6 (6.94)	14.5 (5.71)
BGS023-x-x-45	27.6 (8.90)	22.6 (6.94)	19.5 (7.68)
BGS023-x-x-50	32.6 (12.84)	27.6 (8.90)	24.5 (9.65)